



European Patent Office



(11)

EP 0 746 037 A3

(12)

EUROPEAN PATENT APPLICATION

(51) Int. Cl.⁶: **H01L 29/43**, H01L 21/335,
H01L 29/80

(21) Application number: 96108453.0

(22) Date of filing: 28.05.1996

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(30) Priority: 02.06.1995 US 459855

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(54) N-type HIGFET and method

(57) An N-type HIGFET (10) utilizes two etch layers (17,18) to form a gate insulator (16) to be shorter than the gate electrode (21). This T-shaped gate structure facilitates forming source (23) and drain (24) regions

that are separated from the gate insulator (16) by a distance (22) in order to reduce leakage current and increase the breakdown voltage.

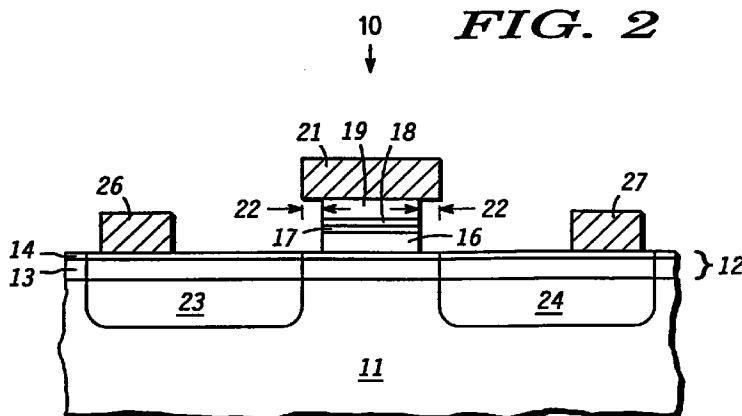


FIG. 2

EP 0 746 037 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 96 10 8453

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	A. DOMINGO ET AL.: APPLIED PHYSICS LETTERS, vol. 52, no. 17, 25 April 1988, pages 1395-1397, XP002052198 * figure 2 *	10	H01L29/43 H01L21/335 H01L29/80
A	---	1-9	
A	S. UMEBACHI ET AL.: IEEE TRANSACTIONS ON ELECTRON DEVICES , August 1975, pages 613-614, XP002052044 * figure 1 *	1-10	
A	---	1-10	
A	M.D. FEUER ET AL.: IEEE ELECTRON DEVICE LETTERS, vol. ed1-8, no. 1, January 1987, pages 33-35, XP002052045 * figure 1 *	1-10	

			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H01L
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
BERLIN		15 January 1998	Juhl, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03 82 (P04C01)